

B1

ACK packet to the source indicating that the source should send the packet again later because the destination was busy or an error occurred.

Please substitute the following for the paragraph beginning on page 5, line 15:

B2

Now referring to **Figure 1**, a physical layer (PHY) 10 has one or more ports which can be connected to a serial bus not shown. For each such port, per port logic 12 is provided as part of PHY 10. The PHY 10 receives a receive signal 32 and transmits a transmit signal 34 through each active port. Per port logic 12 includes a decoder 22 to decode and descramble the incoming receive signal 32. In one embodiment the decoder 22 is an 8B10B decoder and descrambler, which performs 8-bit 10-bit decoding. This means each 10-bit value coming in as the receive signal 32 is decoded into an 8-bit value. The decoder 22 is coupled to a port state machine 26 which receives a control value decoded by the decoder. Similarly, an encoder 24 is used to encode and scramble the outgoing transmit signal 34. In one embodiment of the invention the encoder performs 8B10B encoding. Analogous to the decode case, each byte of data to be transmitted is encoded as a 10-bit value. Thus, a number of codings exist that are not used for normal data encoding.

Please substitute the following for the paragraph beginning on page 6, line 3:

B3

Additionally, the decoder 22 is coupled to an elasticity buffer 18. The elasticity buffer 18 buffers data decoded from the received signal 32 while that data is awaiting transfer to the link and/or repetition out on one or more ports of PHY 10 as the transmit signal 34. The PHY state machine 14 and the arbitration state machine 16 may be combined as a single state machine or may be implemented as two separate state machines. The PHY state machine 14 provides the intelligence for the PHY including generation of any PHY generated packets. The arbitration state machine 16 assesses incoming arbitration information and provides outgoing arbitration requests. If the node is originating a packet on the bus it is the nominal root node. The nominal root node has complete arbitration state information for the topology. Based on this information the arbitration state machine 16 of the nominal root node grants the arbitration request of a highest